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APPLICANT: ULVAC JAPAN LTD:

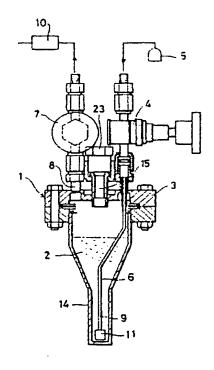
INVENTOR: KATO YOICHI;

INT.CL.

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TITLE

BUBBLER FOR CVD DEVICE



ABSTRACT :

PURPOSE: To improve the evaporation efficiency of a raw material by mounting an element of a porous sintered metal having the pore size smaller than the size of the solid raw material to a port for introducing a carrier gas into a bubbler vessel.

CONSTITUTION: The solid raw material 2 is housed in the bubbler vessel 1 and is heated by a mantle heater, etc. The carrier gas is introduced from the introducing port 9 into the vessel 1 to generate the saturation pressure of the raw material 2. This material is sent into a film forming chamber 10 of the CVD device from a leading out pipe 8. The element 11 of the porous sintered metal is mounted to this introducing port 9. The carrier gas is ejected to a wide range from the many fine pores of the element 11 to the circumferences thereof and is uniformly dispersed. The wider contact area of the raw material 2 with the carrier gas is taken and the sufficient saturated steam pressure is obtd. The back flow of the raw material 2 to the mass flow controller is obviated even if the pressure on the film forming chamber 10 side increases. The damaging of the controller 4 is thus prevented.

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